



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: issue No.: Certificate history:

Status:

Date of Issue: **2011-04-27** Page 1 of 3

Applicant: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Electrical Apparatus: **Solas & Solas (Emergency) LED Luminaires**
Optional accessory:

Type of Protection: **Flameproof/Increased Safety & Dust Protection by Enclosure**

Marking: **Ex d e IIB T5 Gb Ex tb IIIC T100°C Db IP6X (Tamb - see schedule)**

Approved for issue on behalf of the IECEx
Certification Body:

PP R S Sinclair *M P O W N E Y*

Position: Managing Director

Signature:
(for printed version)

M P O W N E Y

27/4/11

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

Baseefa
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 11.0047

Date of Issue: 2011-04-27

Issue No.: 0

Page 2 of 3

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

- | | |
|--|--|
| IEC 60079-0 : 2007-10
Edition: 5 | Explosive atmospheres - Part 0: Equipment - General requirements |
| IEC 60079-1 : 2007-04
Edition: 6 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" |
| IEC 60079-31 : 2008
Edition: 1 | Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't' |
| IEC 60079-7 : 2006-07
Edition: 4 | Explosive atmospheres - Part 7: Equipment protection by increased safety "e" |

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/BAS/ExTR11.0092/00

Quality Assessment Report:

GB/BAS/QAR06.0027/02



IECEX Certificate of Conformity

Certificate No.: IECEX BAS 11.0047

Date of Issue: 2011-04-27

Issue No.: 0

Page 3 of 3

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Solas & Solas (Emergency) Luminaires comprise up to 34 high intensity LEDs mounted within a circular metal enclosure with a glass window cover. The cover is fixed to the body casting with 8 off M10 stainless steel screws of grade A2-70.

An Ex e terminal box on the side of the body contains a certified terminal block. Internal and external earth facilities are provided, together with up to two cable entries. The cable entry devices used shall be suitably certified and maintain the IP rating of the enclosure.

The maximum/minimum ambient temperatures applicable for each luminaire are determined by the function of the unit as follows:-

Model	Ambient*	Maintained or Non-maintained	Battery Heater
Solas Spotlight	-55°C to +55°C	N/A - Switched only	N/A
Solas (Emergency)	-55°C to +55°C	Non-maintained	Yes
	-20°C to +55°C	Non-maintained	No
	-55°C to +40°C	Maintained	Yes
	-20°C to +40°C	Maintained	No

* The permitted ambient temperatures may be restricted to other figures within the ranges as shown above.

For further detail see the description in the annex.


CONDITIONS OF CERTIFICATION: NO



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEX BAS 11.0047	issue No.:	1	Certificate history:
Status:	Current			Issue No. 1 (2011-12-15) Issue No. 0 (2011-4-27)
Date of Issue:	2011-12-15	Page 1 of 4		
Applicant:	Chalmit Lighting 388 Hillington Road Glasgow G52 4BL United Kingdom			
Electrical Apparatus: <i>Optional accessory:</i>	Solas & Solas (Emergency) LED Luminaires			
Type of Protection:	Flameproof/Increased Safety & Dust Protection by Enclosure			
Marking:	Ex d e IIB T5 Gb Ex tb IIIC T100°C Db IP6X (Tamb - see schedule)			
Approved for issue on behalf of the IECEx Certification Body:	R S Sinclair			
Position:	Managing Director			
Signature: (for printed version)				
Date:	<u>15-12-11</u>			

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Certificate issued by:

Baseefa
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No.: IECEx BAS 11.0047

Date of Issue: 2011-12-15

Issue No.: 1

Page 2 of 4

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Manufacturing location(s):

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STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

- | | |
|--|--|
| IEC 60079-0 : 2007-10
Edition: 5 | Explosive atmospheres - Part 0: Equipment - General requirements |
| IEC 60079-1 : 2007-04
Edition: 6 | Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d" |
| IEC 60079-31 : 2008
Edition: 1 | Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t" |
| IEC 60079-7 : 2006-07
Edition: 4 | Explosive atmospheres - Part 7: Equipment protection by increased safety "e" |

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/BAS/ExTR11.0092/00

GB/BAS/ExTR11.0282/00

Quality Assessment Report:

GB/BAS/QAR06.0027/03



IECEX Certificate of Conformity

Certificate No.: IECEX BAS 11.0047

Date of Issue: 2011-12-15

Issue No.: 1

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Solas & Solas (Emergency) Luminaires comprise up to 34 high intensity LEDs mounted within a circular metal enclosure with a glass window cover. The cover is fixed to the body casting with 8 off M10 stainless steel screws of grade A2-70.

An Ex e terminal box on the side of the body contains a certified terminal block. Internal and external earth facilities are provided, together with up to two cable entries. The cable entry devices used shall be suitably certified and maintain the IP rating of the enclosure.

The maximum/minimum ambient temperatures applicable for each luminaire are determined by the function of the unit as follows:-

Model	Ambient*	Maintained or Non-maintained	Battery Heater
Solas Spotlight	-55°C to +55°C	N/A - Switched only	N/A
Solas (Emergency)	-55°C to +55°C	Non-maintained	Yes
	-20°C to +55°C	Non-maintained	No
	-55°C to +40°C	Maintained	Yes
	-20°C to +40°C	Maintained	No

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For further detail see the description in the annex.

CONDITIONS OF CERTIFICATION: NO

Empty box for conditions of certification.



IECEX Certificate of Conformity

Certificate No.: IECEX BAS 11.0047

Date of Issue: 2011-12-15

Issue No.: 1

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 1.1

To permit 110Vac. - 130Vac. versions of the luminaires.

Variation 1.2

To permit stopping plugs afforded IECEX BAS 11.0071X to replace a line bushing between the increased safety and flameproof enclosures.

ExTR: GB/BAS/ExTR11.0282/00

File Reference: 11/0849



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 11.0047 issue No.:2

Status: **Current**

Date of Issue: **2013-07-15** Page 1 of 4

Certificate history:
Issue No. 2 (2013-7-15)
Issue No. 1 (2011-12-15)
Issue No. 0 (2011-4-27)

Applicant: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Electrical Apparatus: **Solas & Solas (Emergency) LED Luminaires**
Optional accessory:


Type of Protection: **Flameproof/Increased Safety & Dust Protection by Enclosure**

Marking: **Ex d e IIB T5 Gb**
Ex tb IIIC T100°C Db IP6X (Tamb - see schedule)

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: General Manager

Signature:
(for printed version)



15/7/13

Date:

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Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom





IECEx Certificate of Conformity

Certificate No.: IECEx BAS 11.0047
Date of Issue: 2013-07-15 Issue No.: 2
Page 2 of 4

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Explosive atmospheres - Part 0: Equipment - General requirements
Edition: 5
IEC 60079-1 : 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition: 6
IEC 60079-31 : 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'
Edition: 1
IEC 60079-7 : 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition: 4

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/BAS/ExTR11.0092/00

GB/BAS/ExTR11.0282/00

GB/BAS/ExTR13.0155/00

Quality Assessment Report:

GB/BAS/QAR06.0027/03



IECEX Certificate of Conformity

Certificate No.: IECEX BAS 11.0047

Date of Issue: 2013-07-15

Issue No.: 2

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Solas & Solas (Emergency) Luminaires comprise up to 34 high intensity LEDs mounted within a circular metal enclosure with a glass window cover. The cover is fixed to the body casting with 8 off M10 stainless steel screws of grade A2-70.

An Ex e terminal box on the side of the body contains a certified terminal block. Internal and external earth facilities are provided, together with up to two cable entries. The cable entry devices used shall be suitably certified and maintain the IP rating of the enclosure.

The maximum/minimum ambient temperatures applicable for each luminaire are determined by the function of the unit as follows:-

Model	Ambient*	Maintained or Non-maintained	Battery Heater
Solas Spotlight	-55°C to +55°C	N/A - Switched only	N/A
Solas (Emergency)	-55°C to +55°C	Non-maintained	Yes
	-20°C to +55°C	Non-maintained	No
	-55°C to +45°C	Maintained	Yes
	-20°C to +45°C	Maintained	No

* The permitted ambient temperatures may be restricted to other figures within the ranges as shown above.

For further detail see the description in the annex.

CONDITIONS OF CERTIFICATION: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 11.0047

Date of Issue: 2013-07-15

Issue No.: 2

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 2.1

An increase in the maximum permitted ambient temperature for the maintained units to +45°C.

ExTR: **GB/BAS/ExTR13.0155/00**

File Reference: **13/0566**



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX BAS 11.0047** issue No.:3

Status: **Current**

Date of Issue: **2017-03-08** Page 1 of 4

Certificate history:
Issue No. 3 (2017-3-8)
Issue No. 2 (2013-7-15)
Issue No. 1 (2011-12-15)
Issue No. 0 (2011-4-27)

Applicant: **Chalmit Lighting
388 Hillington Road
Glasgow
G52 4BL
United Kingdom**

Equipment: **Solas & Solas (Emergency) LED Luminaires**
Optional accessory:


Type of Protection: **Flameproof/Increased Safety & Dust Protection by Enclosure**

Marking: **Ex d e IIB T5 Gb
Ex tb IIIC T100°C Db IP6X (Tamb - see schedule)**

Approved for issue on behalf of the IECEx Certification Body: **R S Sinclair**

Position: **General Manager**

Signature: **(for printed version)**


8 - 3 - 17

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:





IECEx Certificate of Conformity

Certificate No.: IECEx BAS 11.0047

Date of Issue: 2017-03-08

Issue No.: 3

Page 2 of 4

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2007-10 Edition: 5	Explosive atmospheres - Part 0: Equipment - General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2008 Edition: 1	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure 't'
IEC 60079-7 : 2006-07 Edition: 4	Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

GB/BAS/ExTR11.0092/00
GB/BAS/ExTR16.0233/00

GB/BAS/ExTR11.0282/00

GB/BAS/ExTR13.0155/00

Quality Assessment Report:

GB/BAS/QAR06.0027/06



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 11.0047

Date of Issue: 2017-03-08

Issue No.: 3

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Solas & Solas (Emergency) Luminaires comprise up to 34 high intensity LEDs mounted within a circular metal enclosure with a glass window cover. The cover is fixed to the body casting with 8 off M10 stainless steel screws of grade A2-70.

An Ex e terminal box on the side of the body contains a certified terminal block. Internal and external earth facilities are provided, together with up to two cable entries. The cable entry devices used shall be suitably certified and maintain the IP rating of the enclosure.

The maximum/minimum ambient temperatures applicable for each luminaire are determined by the function of the unit as follows:-

Model	Ambient*	Maintained or Non-maintained	Battery Heater
Solas Spotlight	-55°C to +55°C	N/A - Switched only	N/A
Solas (Emergency)	-55°C to +55°C	Non-maintained	Yes
	-20°C to +55°C	Non-maintained	No
	-55°C to +45°C	Maintained	Yes
	-20°C to +45°C	Maintained	No

* The permitted ambient temperatures may be restricted to other figures within the ranges as shown above.

For further detail see the description in the annex.

SPECIFIC CONDITIONS OF USE: NO



IECEx Certificate of Conformity

Certificate No.: IECEx BAS 11.0047

Date of Issue: 2017-03-08

Issue No.: 3

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 3.1

To permit the fitting, of an alternative LED of Type Cree XLamp XP-G2 in the luminaire

ExTR: GB/BAS/ExTR16.0233/00

File Reference: 16/0591



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx BAS 11.0047

Issue No: 4

Certificate history:

Status: **Current**

Issue No. 4 (2018-02-13)

Date of Issue: **2018-02-13**

Page 1 of 4

Issue No. 3 (2017-03-08)

Applicant: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Issue No. 2 (2013-07-15)

Issue No. 1 (2011-12-15)

Issue No. 0 (2011-04-27)

Equipment: **Solas & Solas (Emergency) LED Luminaires**

Optional accessory:

Type of Protection: **Flameproof/Increased Safety & Dust Protection by Enclosure**

Marking:

Ex db eb IIB T5 Gb

Ex tb IIIC T100°C Db IP6X (Tamb – see schedule)

*Approved for issue on behalf of the IECEx
Certification Body:*

R S Sinclair

Position:

Technical Manager

*Signature:
(for printed version)*

Date:

13-2-18

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire, SK17 9RZ
United Kingdom





IECEX Certificate of Conformity

Certificate No: IECEX BAS 11.0047

Issue No: 4

Date of Issue: **2018-02-13**

Page 2 of 4

Manufacturer: **Chalmit Lighting**
388 Hillington Road
Glasgow
G52 4BL
United Kingdom

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
IEC 60079-7 : 2015 Edition:5.0	Explosive atmospheres – Part 7: Equipment protection by increased safety "e"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/BAS/ExTR11.0092/00](#)

[GB/BAS/ExTR11.0282/00](#)

[GB/BAS/ExTR13.0155/00](#)

[GB/BAS/ExTR16.0233/00](#)

[GB/BAS/ExTR17.0352/00](#)

Quality Assessment Report:

[GB/BAS/QAR06.0027/07](#)



IECEX Certificate of Conformity

Certificate No: IECEx BAS 11.0047

Issue No: 4

Date of Issue: 2018-02-13

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Solas & Solas (Emergency) Luminaires comprise up to 34 high intensity LEDs mounted within a circular metal enclosure with a glass window cover. The cover is fixed to the body casting with 8 off M10 stainless steel screws of grade A2-70.

An Ex e terminal box on the side of the body contains a certified terminal block. Internal and external earth facilities are provided, together with up to two cable entries. The cable entry devices used shall be suitably certified and maintain the IP rating of the enclosure.

The maximum/minimum ambient temperatures applicable for each luminaire are determined by the function of the unit as follows:-

Model	Ambient*	Maintained or Non-maintained	Battery Heater
Solas Spotlight	-55°C to +55°C	N/A - Switched only	N/A
Solas (Emergency)	-55°C to +55°C	Non-maintained	Yes
	-20°C to +55°C	Non-maintained	No
	-55°C to +45°C	Maintained	Yes
	-20°C to +45°C	Maintained	No

* The permitted ambient temperatures may be restricted to other figures within the ranges as shown above.

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SPECIFIC CONDITIONS OF USE: NO



IECEX Certificate of Conformity

Certificate No: IECEx BAS 11.0047

Issue No: 4

Date of Issue: **2018-02-13**

Page 4 of 4

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation 4.1

To allow a modification to the existing Solas driver circuit.

Variation 4.2

To assess the Solas & Solas (Emergency) LED Luminaires against the following standards:


IEC 60079-0:2011 Edition 6, IEC 60079-1:2014 Edition 7, IEC 60079-7:2015 Edition 5 and IEC 60079-31:2013 Edition 2

ExTR: **GB/BAS/ExTR17.0352/00**

File Reference: **17/0661**

Annex:

[IECEX BAS 11.0047 annex.pdf](#)

Baseefa Rockhead Business Park Staden lane, Buxton, Derbyshire SK17 9RZ United Kingdom		
ANNEX to IECEx BAS 11.0047	Issue No. 0	Date: 2011/04/21

The Solas & Solas (Emergency) Luminaires comprise a circular body with external fins and a circular flat cover, both manufactured from aluminium, brass or gunmetal. The cover is fitted with a glass window sealed in place by a silicone cement. The cover is fixed to the body with 8 off M10 stainless steel screws of grade A2-70.

The body has an integral increased safety terminal box on the side containing a 4 or 6 way terminal block to either IECEx PTB 04.0004U or IECEx SIR 05.0037U. The rear wall of the terminal box is fitted with up to 2 line bushings to either IECEx BAS 07.0076U or IECEx PTB 06.0093U which provide interconnection with the flameproof chamber.

The LED lamp array, comprising up to 34 high intensity LEDs and 2 indicator LEDs, is mounted within the flameproof chamber on an aluminium mounting plate (flat for the narrow beam spotlight unit or angled strips for the wide beam floodlight unit) directly behind the cover window.

In addition supplementary control gear as follows may optionally be mounted within the enclosure base to form the various models/functions as specified in the table below :-

- a. additional terminal blocks
- b. a battery pack, comprising 18 cells
- c. a battery pack heater, c/w thermal switches
- d. a LED mains driver
- e. an emergency driver/inverter

Internal and external earth facilities are provided.

Up to two M20 or M25 cable entries, or NPT equivalents, are provided in the side wall of the terminal box for the accommodation of suitably certified cable entry devices. The cable entry devices or stopping plugs should be certified as Equipment (not a Component) and be installed to maintain the IP rating of the enclosure.

The maximum/minimum ambient temperatures applicable for each luminaire are determined by the function of the unit (i.e. the internal components fitted) as follows:-

Model	Ambient*	Maintained or Non-maintained	Battery Heater
Solas Spotlight	-55°C to +55°C	N/A- Switched only	N/A
Solas (Emergency)	-55°C to +55°C	Non-maintained	Yes
	-20°C to +55°C	Non-maintained	No
	-55°C to +40°C	Maintained	Yes
	-20°C to +40°C	Maintained	No

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